A REPORT on the OXO PROPERTY

of

TRANS-YUKON EXPLORATIONS LTD.

Ketza River Area, Yukon

by

T.L. Sadlier-Brown

P.H. Sevensma Consultants Ltd.

November 14, 1968.

105-F-9

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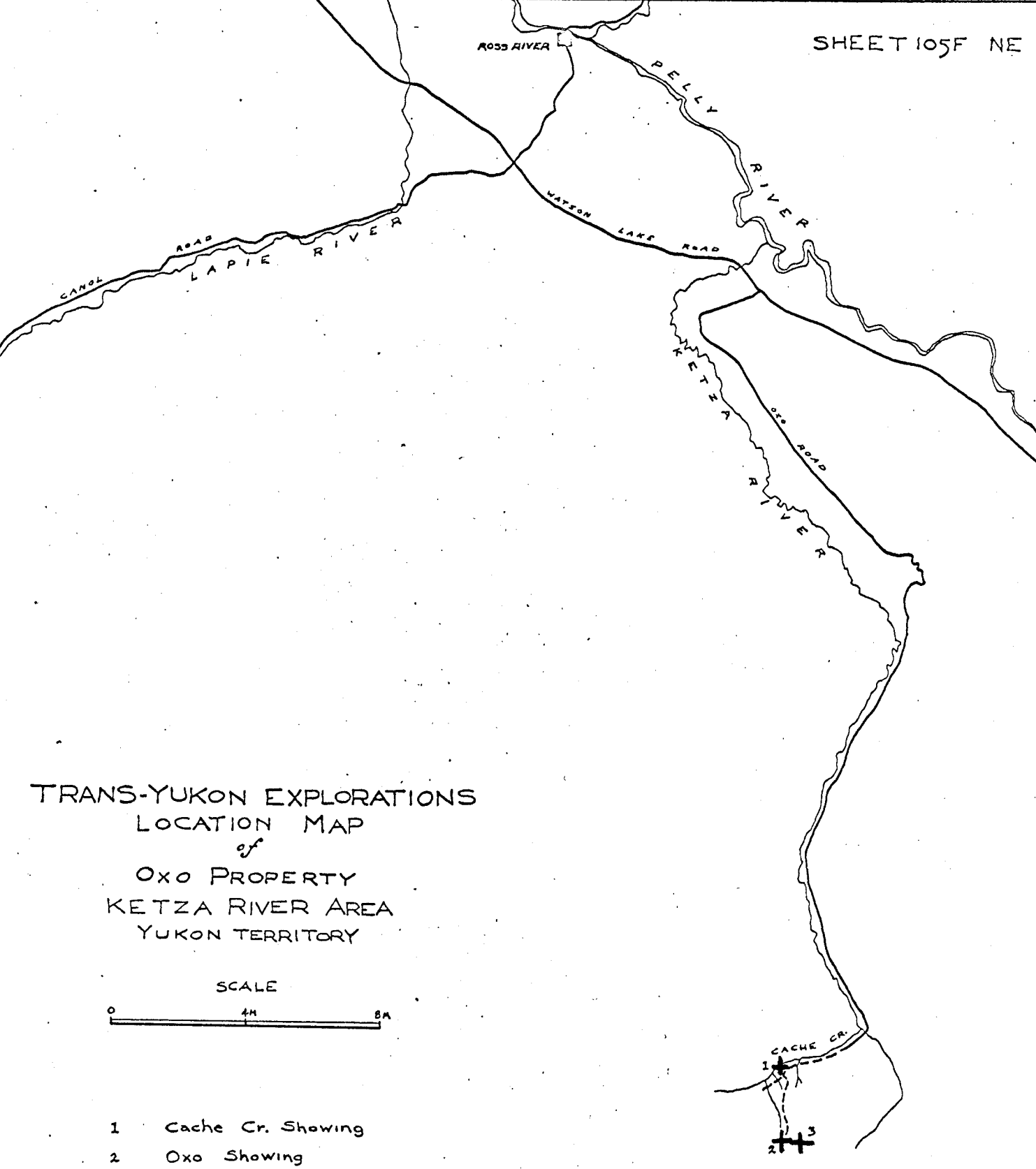


TRANS-YUKON EXPLORATIONS
LOCATION MAP
of
OXO PROPERTY
KETZA RIVER AREA
YUKON TERRITORY

SCALE

0 4M 8M

1 Cache Cr. Showing
2 Oxo Showing
3 Sun Group Showing

MAP INDEX

REPORT on PROGRESS on the OXO PROPERTY
of
TRANS-YUKON EXPLORATIONS LTD.
Ketza River Area, Yukon
by
T.L. Sadlier-Brown
P.H. Sevensma Consultants Ltd.

1. INTRODUCTION

The Oxo and adjoining claims under option to Trans-Yukon Explorations Ltd. are located near the head of Cache Creek, a north-easterly flowing tributary of the Ketza River, on Claim Sheet 105-F-9. They form a group of 64 claims and fractions including:

Oxo 1 - 26 (75628-75636) (89163-89178) (71272)
Moon 1 - 4 (Y16629-Y16632)
Sun 1 - 12 (Y27921-Y27932)
Blizzard 1 - 10 (grant numbers not issued)
Horn 1 - 12 (grant numbers not issued)

The claim group lies immediately south of a group of Crown granted claims held by Con West Explorations and west of the property of Stump Mines, where development work is being carried out at the time of writing.

Terrain in the area is mountainous with maximum elevation of about 6,000 feet and relief about 2,000 feet. Much of the claim group including three of the four sulphide showings is above tree line.

Access to the property is by a 28 mile dirt road following the Ketza River from the Watson Lake - Ross River Road, a few miles south of its junction with the Canol Road, to the Stump Mine camp. From there, a three mile road, presently suitable only for four-wheel drive vehicles, leads to the Trans-Yukon camp on Cache Creek. A tractor road about $2\frac{1}{2}$ miles long has recently been completed from this point to the Oxo showing, which is south of the camp on the divide between Cache and White Creeks.

During July, August, September and October, 1968, an exploration program was carried out on the property under the direction of P.H. Sevensma Consultants Ltd.

Two grids totalling 125,700 feet, or about 22 miles of line have been established and geochemical surveys have been carried out on each. In addition, geophysical work was done in selected areas and geological mapping on a reconnaissance and detailed scale was carried out. The geophysical work was performed by Eagle Geophysics of Vancouver, B.C. under the direction of J. Lloyd and consisted of a Crone JEM vertical loop electromagnetic survey, a Ronka EM 16 survey and a magnetometer survey. Geochemical sampling, prospecting and claim staking was done by company personnel. Sample analyses were carried out by both the Whitehorse Assay Office and the Barringer Research Laboratory at Ross River. Geological maps were prepared by T.L. Sadlier-Brown of P.H. Sevensma Consultants Ltd.

The two grids will be referred to as the Oxo grid, which covers the bulk of the property including the Oxo showing, comprising some 109,300 feet of line, and the Cache Creek grid in the extreme northeastern part of the property, comprising some 16,400 feet of line. As extensions of the Oxo grid have caused it to intersect the Cache Creek grid, geochemical plots of each are shown on the same map.

2. GEOLOGY

General Statement

The Oxo and adjacent claims are underlain by a complex

sequence of palaeozoic rocks which have been faulted, folded and cut by dikes and veins of various kinds. The following stratigraphic column is suggested for the area[1]:

Quaternary	7	Glacial material
?	6	Intermediate dikes
?		Quartz and sulphide veining
Silurian and Devonian	5	Buff weathering dolimite and minor grey quartzite
Middle and Upper Cambrian	4	Dark grey graphitic schist
	3	Silty plated limestone
	2	Lustrous light grey phyllite
Lower Cambrian	1	Massive grey limestone

The oldest rocks in the area are the medium to dark grey lower cambrian limestones (1) occupying the southern and northernmost parts of the claim group. they are cut, locally by both quartz and calcite veins,and are the hosts for both the pyrrhotite skarn and sulphide-bearing vein occurrences.

Overlying the limestone is a horizon of light grey lustrous phyllite (2). It is soft, fissile, and with a light grey to white streak. It often exhibits an unique sheen or lustre on parting surfaces and in some cases (the creek valley southeast of the campsite) relict bedding is distinctly seen. The phyllite is usually folded, crenulated, and cut by irregular veins of white quartz but no sulphides have been observed in these or their host rock.

[1]Ages are determined from Wheeler, Green and Roddick, GSC Map 7-1960, Geology, Quiet Lake (105F), 1960.

Apparently overlying the phyllite is a thin poorly exposed member (3) consisting of silty plated limestone and dark grey to black argillaceous limestone. It in turn appears to be overlain by a dark grey graphitic schist (4). Rocks of this unit are thinly laminated, soft and with a dark grey to black streak. They are in contact with the limestone of unit 1 in the general vicinity of the Oxo showing where they may host some sulphide mineralization.

The dolomite (5) which overlies the graphitic schist is a massive, buff weathering, greyish coloured rock. It is quite resistant and forms the 6,400 foot peak northeast of the Oxo vein. Like the limestone it also appears to be a favourable host for sulphide mineralization and two galena-bearing veins have so far been found within it. Lenses of grey quartzite are also present and, near the summit of the peak, the dolomite is cut by an east-west trending dike of grey-green aphanatic rock (6).

The larger valleys have all been subjected to glacial activity and are partly filled with debris, effectively obscuring much of the bedrock.

3. GEOCHEMISTRY

Soil geochemical sampling has been carried out over both the Oxo and Cache Creek grids as well as in selected reconnaissance areas. Samples have all been run for lead and some were run for copper, zinc and silver as well. Testing was by atomic absorption methods at both the Whitehorse Assay Office and the Barringer Research Lab at Ross River.

Cache Creek Grid

On the Cache Creek grid, samples were taken at 100 foot intervals and run for copper, lead, zinc and silver. An area of roughly coincident Cu., Pb., Zn. anomalies was located and geophysical work has indicated a relationship between these and magnetic anomalies which are probably caused by chalcopyrite-bearing pyrrhotite skarns in the limestone of unit 1. Trenching has exposed one of these at about 3 + 00 E on the base line.

A potentially important Pb. anomaly was detected at the extreme southern limit of the grid (16 E, 12 - 14 S). Although small, it may be related to an anomalies area further south on the Oxo grid.

Oxo Grid

All samples from the Oxo grid have been tested for lead and certain areas have been run for copper and zinc as well.

An intense lead geochemical anomaly is present in the immediate vicinity of the Oxo showing (see area 1 on Soil Anomaly Location Map). It is to the order of 600 feet in diameter and covers an area underlain by limestone cut by a massive white quartz. It is rather abruptly truncated to the southeast and east probably because of the overburden derived from the mountain east of the grid. High lead values in the area exceed 7,000 PPM and while much of it can be attributed to the known sulphide occurrence, the anomaly is large enough to suggest that other as yet undiscovered sources may also be present nearby.

About 1,500 feet northwest of the Oxo showing on a northeasterly sloping hillside is another significant anomaly with values over 2,000 PPM lead (Area 2). It is of the order of 2,400 feet long in a north-south direction although the highest values (> 1,000 PPM) are restricted to an area about 1,200 feet long by 200 feet wide. The source for this anomaly is not known, but it is apparently within the Cambrian limestone unit which hosts the Oxo vein.

Between lines 24 N and 44 N and east of the base line is an irregularly shaped Pb soil anomaly (Area 3) apparently related to the extension of a galena vein on the ridge east of the Oxo base line and about 1,000 feet south of the 6,400 foot peak. The anomaly trends north-south along a steep westerly sloping mountainside and is interrupted by areas of outcrop and coarse talus which prevented sampling. A subsidiary anomaly downhill to the west (intersecting 36 N at 6 E and 40 N at 9 E) tentatively appears to be down slope contamination as does the one centered at 40N, 6W.

Another potentially significant anomaly occurs at 96 N, 13 W on the Oxo Grid (Area 4). Its source is not known but it is in the general vicinity of a series of high lead values obtained on a reconnaissance soil geochemical traverse.

Only the southern and eastern parts of the Oxo grid were tested for copper. A Cu geochemical anomaly coincides well with the Pb anomaly in the vicinity of the Oxo showing. It is undoubtably related to the chalcopyrite bearing veins seen in the quartz and limestone in the area. No values above background were detected in the lead anomaly area east of the base line between 24 and 48 N.

Although sampling for zinc was limited only to the showing area and the north central part of the Oxo Grid, no values of any significance were obtained.

4. GEOPHYSICAL SURVEY

Geophysical surveys have been carried out over the Cache Creek Grid and the southern portion of the Oxo Grid. Results were interpreted and plotted by J. Lloyd of Eagle Geophysics, who performed the work. The following is based on these interpretations although modified somewhat in the light of geological and geochemical evidence.

Cache Creek Grid

The magnetic map of the Cache Creek Grid shows a number of isolated magnetic highs averaging from four to five hundred gammas above background value. Although they seem to have no particular trend they are all either in or very near the limestone. One has been stripped by bulldozer and was found to be a zone of massive pyrrhotite containing somewhat over 0.1% copper. Copper geochemical anomalies apparently related to the others, suggest that they are similar, but none found to date are very big, averaging only two to five hundred feet in diameter.

Results from both the Ronka EM 15 and Crone EM surveys indicate a zone of parallel conductors with apparent north-south trends in the west part of the grid and a poor conductor striking about east-west near the base line. The latter may be a shear or a contact between limestone and phyllite, which could occur in that general area. The north-south trending zone however, may be related to the magnetics, particularly at about 7 N on line 0 and possibly near the south ends of lines 8 E and 10 E. In these cases the EM may well be detecting a sulphide zone.

Oxo Grid

Except for three small areas to the order of two or three hundred feet in diameter, the Oxo grid as far north as line 24 N is magnetically flat.

The most northerly anomalies at 12 N, 9 W and 10 N, 6 W (not shown on map) are underlain by limestone. The one at 10 N, 6 W coincides with a small body of massive pyrrhotite like the one found on the Cache Creek gird. The source of the anomaly on line 12 is attributed to a similar body.

The Oxo sulphide body underlies the anomaly at line 0, 2 W. It can be traced by magnetometer for only about 200 feet which may be the limit of the pyrrhotite-bearing mineralization. The dip of the body inferred from the magnetics is southeast and the strike about 30°.

Three different EM surveys have been done on the southern part of the Oxo grid. A horizontal loop survey was performed several years ago and during the present program a Crone EM and an EM 16 were used. All conform reasonably well with one another and indicate a conductor at least 1,600 feet long trending south at about 190° from the vicinity of the Oxo showing and another parallel conductor about 500 feet east of it near the Oxo base Line. All are in areas underlain by schist or on the contact between the schist and limestone to the west. Except in the immediate area of the Oxo showing the causes of the anomalies are unknown. Trenching south of the showing along the trend of the Ronka EM anomaly and a possible EM 16 anomaly has, however, exposed galena which may be significant.

5. MINERAL SHOWINGS

All showings found to date, as well as all known significant geochemical anomalies, occur within either the limestone or buff weathering dolomite in the southern and northern parts of the claim group. The sulphide occurrences are of five general types; massive pyrrhotite skarn; veins of coarse, massive galena, massive pyrite pyrrhotite galena veins; disseminated and massive chalcopyrite in quartz veins; and massive arsenopyrite with pyrite, pyrrhotite, and minor galena.

Cache Creek Area

Skarn type mineralization occurs on the east side of Cache Creek about 200 feet southwest of the present campsite and at about 3 E on the base line of it's Cache Creek Grid. Bulldozer trenching in the vicinity of a small outcrop of pyrite and pyrrhotite and quartz in a diopside skarn has exposed an east-west trending ridge of rock which is composed almost entirely of massive pyrrhotite with lesser amounts of pyrite. A small amount of chalcopyrite is also present evidently associated with quartz grains and veins in the pyrite bearing material. Assays of the massive sulphide gave the following results:

	Au.	Ag.	Pb.	Zn.	Cu.	Ni.
A0017	tr.	tr.	tr.	-	.15	-
A0018	tr.	tr.	.08	.01	.13	-
A0019	tr.	tr.	.01	tr.	.11	tr.

Boulders of similar material were found during road construction on the hillside a few hundred feet up to the southeast of this locality, but bedrock was not reached.

The sulphides are not seen in contact with any host rock but the nearest other outcrop is the massive grey limestone which occurs 400 feet to the southwest.

An occurrence of similar mineralization was examined in the gully of Oxo Creek at about 10 N, 5 W on the Oxo Grid. Massive pyrrhotite is exposed over a length of about 15 feet in a north-south direction. As in the case with the Cache Creek occurrence, the contact with a host rock is not visible. The nearest outcrop is a ledge of bedded grey limestone 240 feet to the north. No assay has been run on this material.

Sun Claims

Massive galena veins have been found at two localities on the Sun claims. On the ridge east of the Oxo grid (24 N, 15 E) is a vein of coarse massive galena striking at 155° and dipping east at 80°. At its southern extremity it is about 2 inches wide, but 10 feet to the north where it disappears under the overburden, it is about 5 inches wide. Two samples ran as follows:

	Pb.(%)	Ag.(oz./t.)
A0022	67.5	57.76
A0023	61.4	49.04

The geochemical anomaly between lines 24 N and 48 N east of the Oxo base line is attributed to a northerly extension of the vein described above although sulphide mineralization has yet to be discovered in the vicinity.

About 1,000 feet north of this occurrence and on the summit of the 6,426 foot peak, the highest point on the property, is a narrow galena vein up to 2 inches wide, striking north-south and dipping vertically. A sample ran Pb. 19.7% and Ag. 13.92 oz./t.

Oxo Grid Area

The original Oxo showing which occurs at about 1 N, 1 W on the Oxo grid consists of a vein or lens of massive sulphide, predominantly pyrite but with galena, pyrrhotite and possibly some magnetite. The body strikes at about 30° and appears to dip steeply to the southeast. Mineralization is visible over a width of about 20 feet at the main showing but may narrow further south. Two assays of representative sulphide material gave results as follows:

		Cu.	Pb.	Ag.
North cut	A0020	.12	11.1	8.72
South cut	A 0021	.18	18.0	13.60

The sulphide body appears to follow the contact betwen a massive grey limestone to the west and a dark grey graphitic schist to the east. It also coincides with a cross cutting zone of quartz veining and possible brecciation trending southwest from the vicinity of the showing. The zone consists of veins from a few inches to 8 or 10 feet wide and irregularly shaped angular patches cutting both limestone and schist. Although generally barren, the quartz is associated with small amounts of chalcopyrite in places.

During the late summer and fall of 1968 trenching was carried out on the Oxo vein south of the original showing and along the trend of a Crone JEM anomaly which roughly parallels both an EM 16 and horizontal loop EM anomaly. A D 7E bulldozer was used to excavate to an average depth of about 10 feet and a width of about 24 feet over a length of 400 feet. Boulders of sulphide material resembling that at the original Oxo showing were uncovered as were some large blocks consisting mainly of galena or galena, calcite, quartz and a little chalcopyrite in massive grey limestone.

Bedrock was exposed at the north end of the trench and for about 250 feet south along its west side. About 200 feet south of the Oxo showing and in the limestone on the west wall of the trench is an irregularly shaped vein of massive galena with minor chalcopyrite striking roughly northwest. A sample assayed at the Whitehorse Assay Office ran Cu. .21%, Pb. 38.9%, Ag. 26.40 oz./ton. A sample found in perma frost and not necessarily in place 100 feet north of the above ran Cu. .06%, Pb. 39.2% and Ag. 26.52 oz./ton.

Broken graphitic schist was uncovered near the east side of the stripped area in the vicinity of the original Oxo showing. It is, however, thought to be in place and on the east side of what is probably a faulted contact between limestone and schist.

Chalcopyrite stringers occur at several localities on the claim group. On the Oxo grid at about 1 S, 1 W they are present with small massive pods of chalcopyrite up to about 4 inches wide in white quartz vein material. They are probably the source of the rather strong but limited Cu. geochemical anomaly in the area.

Veins of chalcopyrite are also present in the limestone in a creek gulley about 2,500 feet north-northwest of the Oxo showing. Although the occurrence is relatively small it may warrant work in the future.

The Horn Group Showing

Arsenopyrite, pyrite, pyrrhotite, and galena occur in a rust-covered outcrop in a small cirque about 9,000 feet west of the Oxo showing. The largest area of exposed sulphide is of the order of 40 feet in diameter and consists mainly of massive arsenopyrite with minor pyrite in a limestone host rock. Grab samples from this occurrence gave the following results:

No.	Location	Cu. %	Pb. %	Au. Oz./t.	Ag. Oz./t.
0036	Sulphide Zone in Cirque	.08	.02	tr.	.52
0037	50' E of #0036	.02	.05	tr.	.44

About 200 feet east of the above is a smaller exposure of similar material from which sample #0038 was obtained. About 8 feet south of #0038 is a zone, probably part of the same sulphide body, in which there is a high galena content. Sample #0039 is a representative grab from it.

No.	Location	Cu. %	Pb. %	Au. oz./t.	Ag. oz./t.
0038	200' E of 0036	.02	.07	tr.	.56
0039	8' S of 0038	.06	15.3	tr.	13.12

The body from which the above samples were taken is poorly exposed but apparently elongate and 3 or 4 feet wide. Like the larger body to the west, it is in a limestone host rock.

6. DISCUSSIONS AND RECOMMENDATIONS

Cache Creek Area

The Cache Creek Grid is underlain by several roughly coincident Cu., Pb., Zn., anomalies of moderate to low intensity. These appear to be occurring downhill from areas underlain by strong magnetic anomalies and a relationship between the two seems probable. If this is the case, both the magnetic and geochemical highs can be attributed to several limited zones of massive pyrrhotite skarn in which a small amount of chalcopyrite occurs. The similarity in magnetic and geochemical responses between these areas and the sulphide zone which was exposed by trenching strongly supports this view.

Assay results from the skarn mineralization averaged .13 Cu., .03 Pb., tr. Zn, tr. Au., tr. Ag., and tr. Ni. and are not considered sufficient to warrant additional work at the present time.

The only outcrop observed in the grid area is the limestone of unit 1 and the apparent presence of the skarn mineralization at several locations on the grid suggests that this unit could be fairly extensive in the area. Although the skarn occurrences are not presently considered significant, the carbonate rocks in which they occur are important as the host rocks to other potentially more valuable types of mineralization. For this reason, the present geochemical sampling program should be expanded to cover areas underlain by the limestone and to follow up the small geochemical anomaly on the southern part of the Cache Creek grid. Pace and compass geochemical lines should be run to the limit of the claim group just north and east of the Cache Creek grid and line 104 N of the Oxo grid should be cut to about 2,600 feet west of the base line and sampled for Pb. at 200 foot intervals. Any space between the south-western limit of the Cache Creek grid and line 104 N should be covered by extending lines 4 E to 14 E of the Cache Creek grid south to intersect line 104 N. Soil samples should be taken and run for Pb. in conjunction with an EM 16 survey which could profitably be extended as far south as 88 N on the Oxo grid.

Sampling in the area southwest of the Cache Creek Grid should cover possible northward extensions of the geochemical high near the north end of the Oxo grid (number 4 on the Location Map) and may be able to relate it to the north-south trending EM anomaly crossing to eastern part of the Cache Creek grid.

Additional work including more bulldozer trenching and a limited diamond drilling program could be warranted and should be provided for.

Sun Group Area

Geochemical results indicate that lead mineralization, possibly a northward extension of the vein found 1,000 feet south of the peak on the Sun Claims, is present on the west side of the mountain between lines 24 N and 48 N. Although no sulphides have yet been found in this area it should be given a high priority for further work including prospecting and trenching, and an EM 16 survey across the strike of the exposed vein. As the anomaly is situated high on a steep slope access will not be easy although a road could be built from the Oxo showing northward and up the mountainside. Barring this, trenching might be feasible using ditching powder and hand tools but this will have to be determined later when the target area is free of snow.

A possible location for trenching might be on, or just south of, 28 N which intersects a considerable amount of outcrop and rubble. Further detailed soil sampling and EM work would be useful in locating a trenching target more accurately if conventional prospecting is not successful.

The presence of an intense anomaly on strike with a known silver-bearing vein suggests a high probability that a drill target will be defined in this area. Consequently, a limited drill program of one or two holes, totalling about 1,000 feet, should be provided for.

A narrow galena vein occurs in dolomite just below the highest point of the peak north of the showing mentioned above. As there is a possibility of additional mineralization the general

area is recommended for a reconnaisance geochemical survey. Traverses should be controlled using the 1,000 foot to the inch map and the air photographs of the same scale and might best be carried out along topographic contours on both sides of the peak and ridge to its south.

The localities of the geochemical highs on line 56 N, east of the base line, should be examined to determine whether or not they warrant follow up work.

The Horn Group Showings

A sample from the occurrence of argentiferous galena on the Horn Group ran 13.12 % Ag. and had a silver to lead ratio of .83. These results are sufficient to warrant some detailed work including limited grid geochemistry and EM and some trenching. A small grid using a base line of the order of 600 feet long is recommended. Cross lines should be at 50 foot intervals near the showing and 100 foot intervals elsewhere. The orientation of the grid will have to be established by a preliminary survey of the area. Soils should be run for lead.

Results of assays from the larger sulphide body to the west of the galena showing were not encouraging but the area should be included in the survey. There is a distinct possibility of finding galena-bearing zones within the arsenopyrite - pyrite bodies as seems to be the case in the occurrence discussed above. Known showings and any discovered during the program should be extended as much as is practical by hand trenching and evaluated before further work is done.

Oxo Showing and Adjacent Area

Bulldozer trenching along the conductive zone which extends south and along the trend of the Oxo showing has exposed argentiferous galena both in float and in place. The material is generally coarse grained, massive, and has an average silver/lead ratio of about .66 to 1. It does not resemble the pyrite and pyrrhotite-bearing vein material from the old trenches about 200 feet to the north. Grades from this area tend to be somewhat lower but silver/lead ratios are slightly higher. The following table compares results:

		Ag. Oz./Ton	Pb. %	Cu.	Ag./Pb.
A0020	Massive Sulphide, North Cut, Oxo Vein	8.72	11.1	.12	.79
A0021	Massive Sulphide, South Cut, Oxo Vein	13.6	18.0	.18	.76
A0040	Massive Galena, Cat. Trench 200'S of A0020	26.40	38.9	.21	.68
A0041	Massive Galena in Perma Frost 100' N of A0040	26.52	39.2	.06	.68

Because of poor weather and thick overburden, the bulldozer trenching south of the Oxo showing was terminated before a conclusion could be made regarding the source of the Crone EM anomaly. The presence of blocks of galena in the trench and at least one vein in place suggests, however, that a galena body is a distinct possibility. As the trenching is approaching its practical limit in the area and would be totally impractical further south along the strike of the anomaly, it is recommended that a diamond drill program be initiated.

Proposed Diamond Drill Program, Oxo Area

The proposed drill program is designed to locate and, if necessary, define the source of a steeply dipping conductive zone striking at about 10° in the area south of the Oxo sulphide showing. Because the attitude of the conductive zone cannot be accurately ascertained from the EM results, the drilling of certain holes will be contingent upon results from preceding ones. The recommended drilling program is outlined in the table on Page 19.

Total footage envisioned for the Oxo area, including holes which cannot be practically spotted on the basis of present information, would be to the order of 4,500 feet.

Because structural considerations are expected to be important, an accurate survey of drill hole locations and collar elevations will be an absolute necessity. This work should be done concurrently with the diamond drilling.

Lead Anomaly West of Oxo Showing

A strong lead soil geochemical anomaly is located between lines 8 N and 32 N and about 1,500 feet west of the Oxo base line. It may be possible to locate its source using the EM 16 in conjunction with detailed soil geochemistry and prospecting. To facilitate this work, lines 4 N to 16 N should be extended to 30 + 00 W. Soil samples should be at 200 foot intervals except in the vicinity of the anomaly and on line 4 N between 13 W and about 25 W where intervals should be shortened to 100 feet. The geophysical survey should extend from the limit of the present survey at 10 W to 30 + 00 W. Provision should be made for trenching and possibly one or two diamond drill holes totalling about 1,000 feet.

No.	Location	Bearing	Dip	Objective and Comment
DDH 1A	0+00, 2+25 W	100°	50°	To test for down dip extension of Oxo sulphide body. Maximum depth 400' or 25' past mineralization.
DDH 1B	0+00, 2+25 W	100°	75°	Should only be drilled if DDH #1 intersects westerly dipping sulphide zone. Maximum depth 300'.
DDH 1C	0+00, 1+00 E	280°	60°	Only to be drilled if DDH #1 intersects zone of east dipping mineralization. Maximum depth 500'.
DDH 2	2+00 S, 2+50 W	100°	50°	Test for conductive zones between 0+80 W and 2+00 W on line 25. Maximum depth 500'.
DDH 3A	6+00 S, 3+25 W	100°	55°	To test conductors at about 2+50 W. Only to be drilled if holes 1 and 2 indicate west dipping conductive zone. Maximum depth 300'.
DDH 3B	6+00 S, 1+50 W	280°	50°	Purpose same as 3 A. Only to be drilled if holes 1 and 2 indicate east dipping conductive zone. Maximum depth 300'.
DDH 4	6+00 S, 1+50 W	100°	55°	To test EM 16 conductor at 0+50 W. Maximum depth 350'.
DDH 5A	12+00 S, 3+00 W	100°	55°	To test conductive zone between 2+00 and 2 +50 W. Maximum depth 300'.
DDH 5B	12+00 S, 1+25 W	280°	50°	Alternate to DDH 5A. Maximum depth 350'.
DDH 6A	8+00 S, 3+25 W	100°	60°	To test conductors between 2+00 and 3+00 W. Maximum depth 300'.
DDH 6B	8+00 S, 2+00 W	280°	60°	Alternate to DDH 6A, Maximum depth 300'.
DDH 7	8+00 S, 2+00 W	100°	50°	To test conductive zone between BL and 1 W. Maximum depth 400'.
DDH 8A	4+00 S, 2+75 W	100°	50°	To test conductor between 1+00 W and 2+00 W. Drilling contingent upon results from DDH 2 and/or DDH 3A. Depth 300'.
DDH 8B	4+00S, 0+75 W	280°	50°	Alternate to DDH 8A. Maximum depth 300'.
DDH 9	16 +00 N, 4+75 W	100°	55°	To test EM conductor near 3+80 W. Maximum depth 300'.

APPENDIX

Summary of Oxo Reports by T. Sadlier-Brown
dated November 14, 1968,
by P.H. Sevensma, Ph.D., P. Eng.

The Oxo property covers a portion of the favorable Cambrian hostrocks in which most of the major lead-zinc-(copper) deposits, both with "normal" silver-lead ratios of about 1/3 and with "high" silver-lead ratios in the range of 0.75 - 2.00 occur in Northern British Columbia and the Yukon.

The area covered by the claims held by Trans Yukon Explorations Ltd., as listed on page 1 of Mr. Sadlier-Brown's report, is highly mineralized, and several very significant geochemical lead anomalies have been located during the summer of 1968, overlying the favorable carbonate rocks and various parts of their contact with the schists and phyllites.

The intensity and size of the anomalies are comparable to those found associated with commercial silver-lead deposits, and mineralized outcrops on the property as well as significant veins under exploration on adjacent ground, indicate that a satisfactory silver-lead ratio of about 0.70 to 1.00 prevails in the area.

Further investigation of these anomalous target areas is therefore fully warranted and a $244,500.00 budget for continuing exploration of the known and of the inferred vein-zones is recommended.

Respectfully submitted,

P.H. Sevensma, Ph.D., P.Eng.

LEGEND

Quaternary	7	Glacial Gravels
?	6	Intermediate Dikes
Sileurian & Devonian	5	Dolomite
Cambrian	4	Graphitic Schist
	3	Silty Limestone
	2	Lustrous Phyllite
	1	Massive Grey Limestone

CACHE CREEK

ROAD TO KETZA R.

CAMP

CACHE CREEK SHOWING

SUN VEIN

OXO SHOWING Pb Cu

132° 15'

61° 32'

SYMBOLS

Limit of Outcrop Area	. . . .
Geological Boundary; Defined	———
Approximate	- - -
Assumed	. . .
Road	. . . . .
Trench	. . . . .
Sulphide Occurence	. . . . .
Vein	. . . . .
Fault (Approximate)	. . . .

Topography by Lockwood Survey Corp.

FIG. 1

TRANS YUKON EXPLORATION LTD.

OXO PROPERTY, KETZA RIVER AREA, GEOLOGY

Whitehorse M.D.— Y.T. 105 - F - 9

P. H. SEVENSMA CONSULTANTS LTD— VANCOUVER B.C.

May 1968, 0 1000 2000ft.

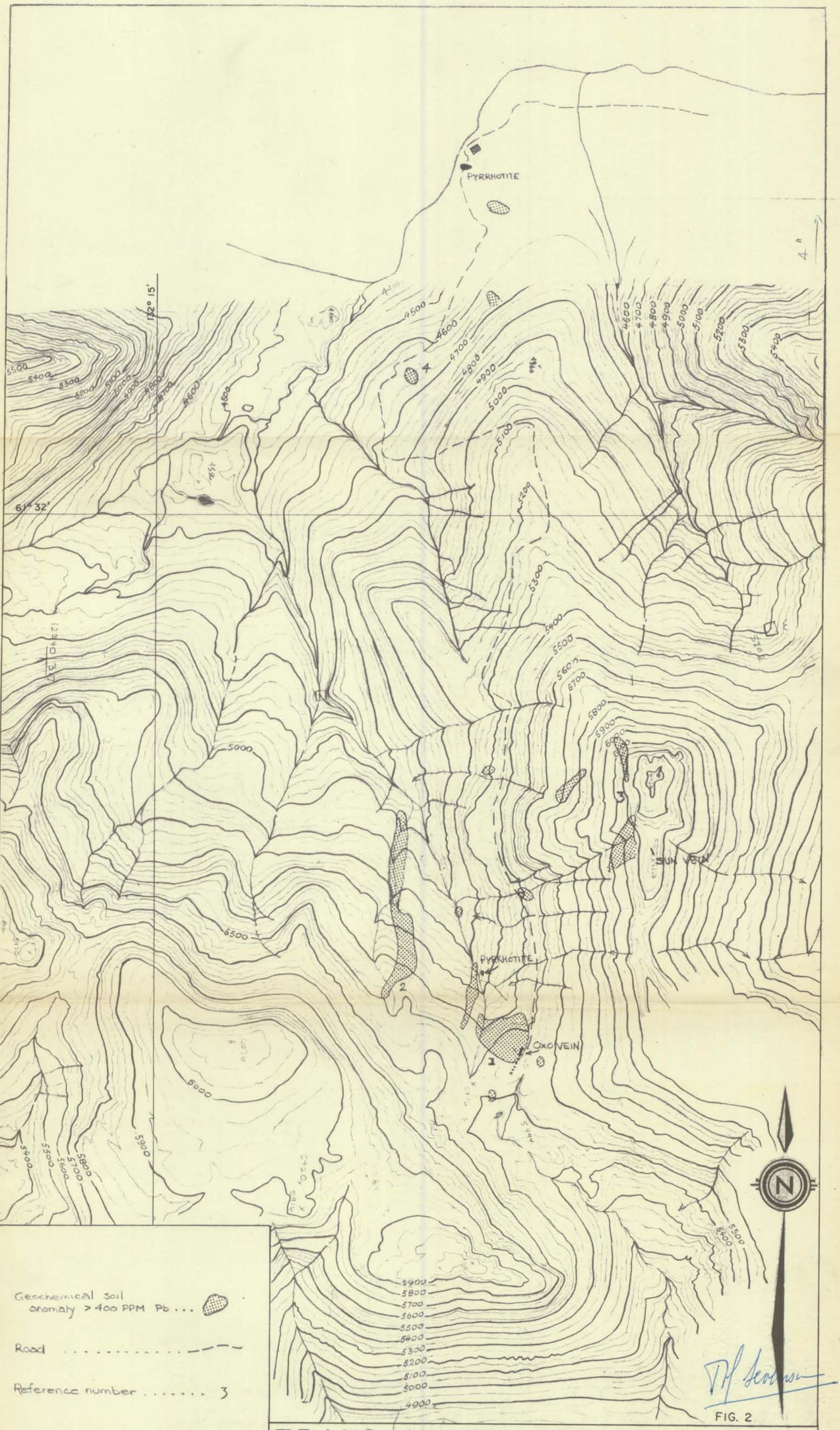


FIG. 2

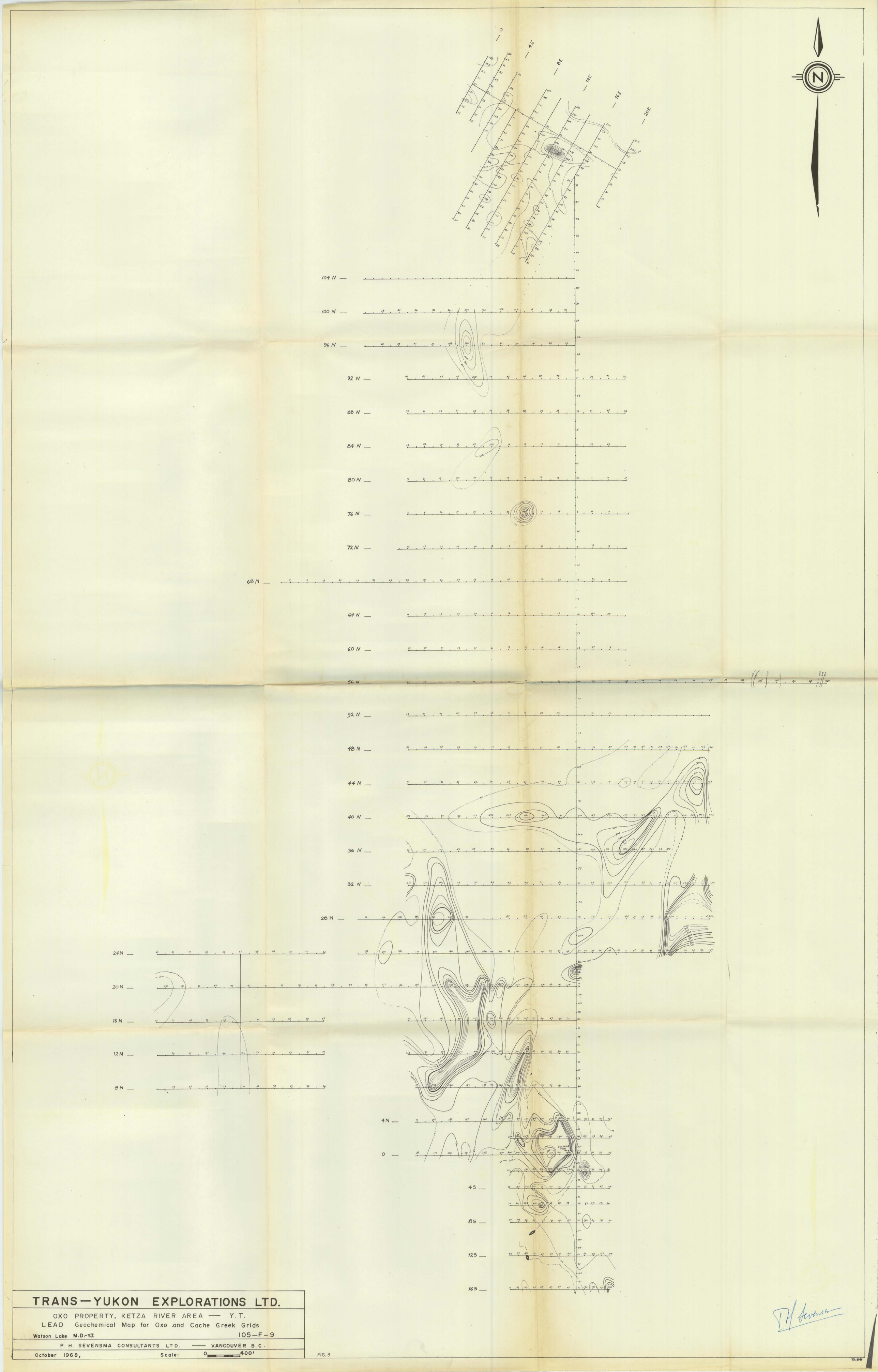
TRANS YUKON EXPLORATION LTD.

OXO PROPERTY, KETZA RIVER AREA - Pb SOIL HIGHS

Whitehorse M.D.— Y.T. 105 - F - 9

P. H. SEVENSMA CONSULTANTS LTD — VANCOUVER B.C.

May 1968, 0 1000 2000ft.



TRANS—YUKON EXPLORATIONS LTD.

OXO PROPERTY, KETZA RIVER AREA — Y. T.

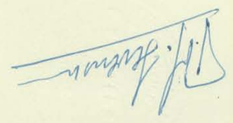
LEAD Geochemical Map for Oxo and Cache Creek Grids

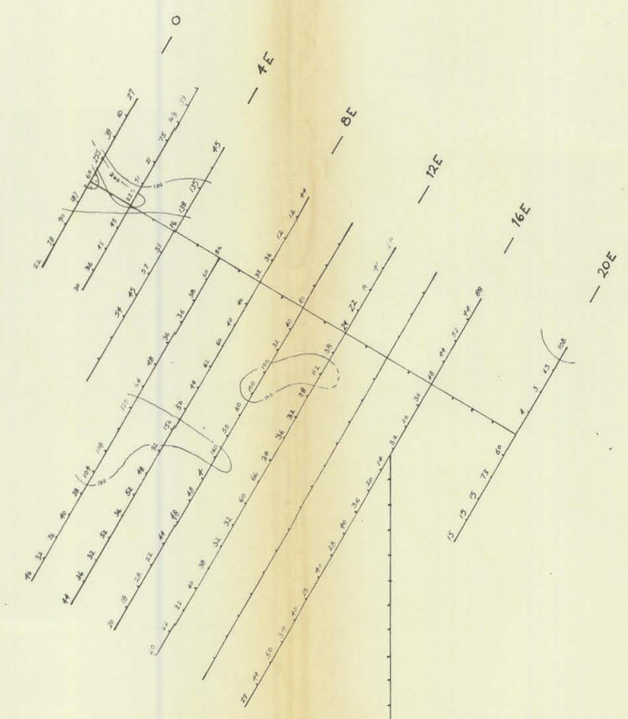
Watson Lake M.D.-Y.T. 105—F—9

P. H. SEVENSMA CONSULTANTS LTD. — VANCOUVER B.C.

October 1968, Scale: 0 400'

FIG. 3





104 N
100 N
96 N
92 N
88 N
84 N
80 N
76 N
72 N
68 N
64 N
60 N
56 N
52 N
48 N
44 N
40 N
36 N
32 N
28 N
24N
20N
16 N
12N
8N
4N
0
4S
8S
12S
16S

TRANS—YUKON EXPLORATIONS LTD.

OXO PROPERTY, KETZA RIVER AREA —— Y.T.

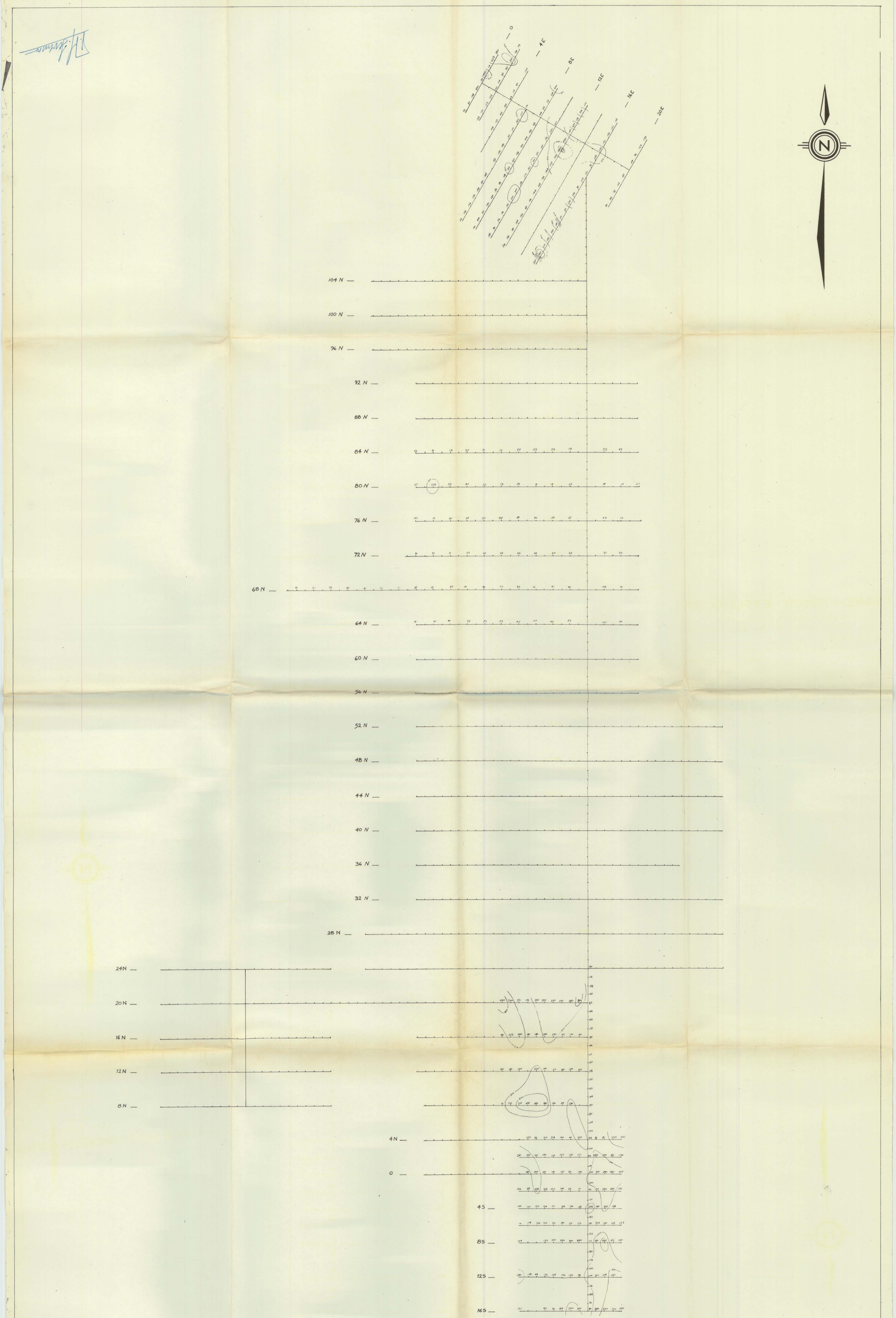
COPPER Geochemical Map for Oxo and Cache Creek Grids

Watson Lake M.D.—Y.T. 105—F—9

P. H. SEVENSMA CONSULTANTS LTD. —— VANCOUVER B.C.

October 1968, Scale: 0 400'

FIG. 4



TRANS YUKON EXPLORATIONS LTD.

GEOCHEMICAL SOIL SURVEY — ZINC PLOT

Oxo and Cache Creek Grid Area

Watson Lake M.D-Y.T 105 — F — 9

P. H. Sevensma Consultanis Ltd. Vancouver B.C.

November 1968, Scale: 0 400'

FIG. 5

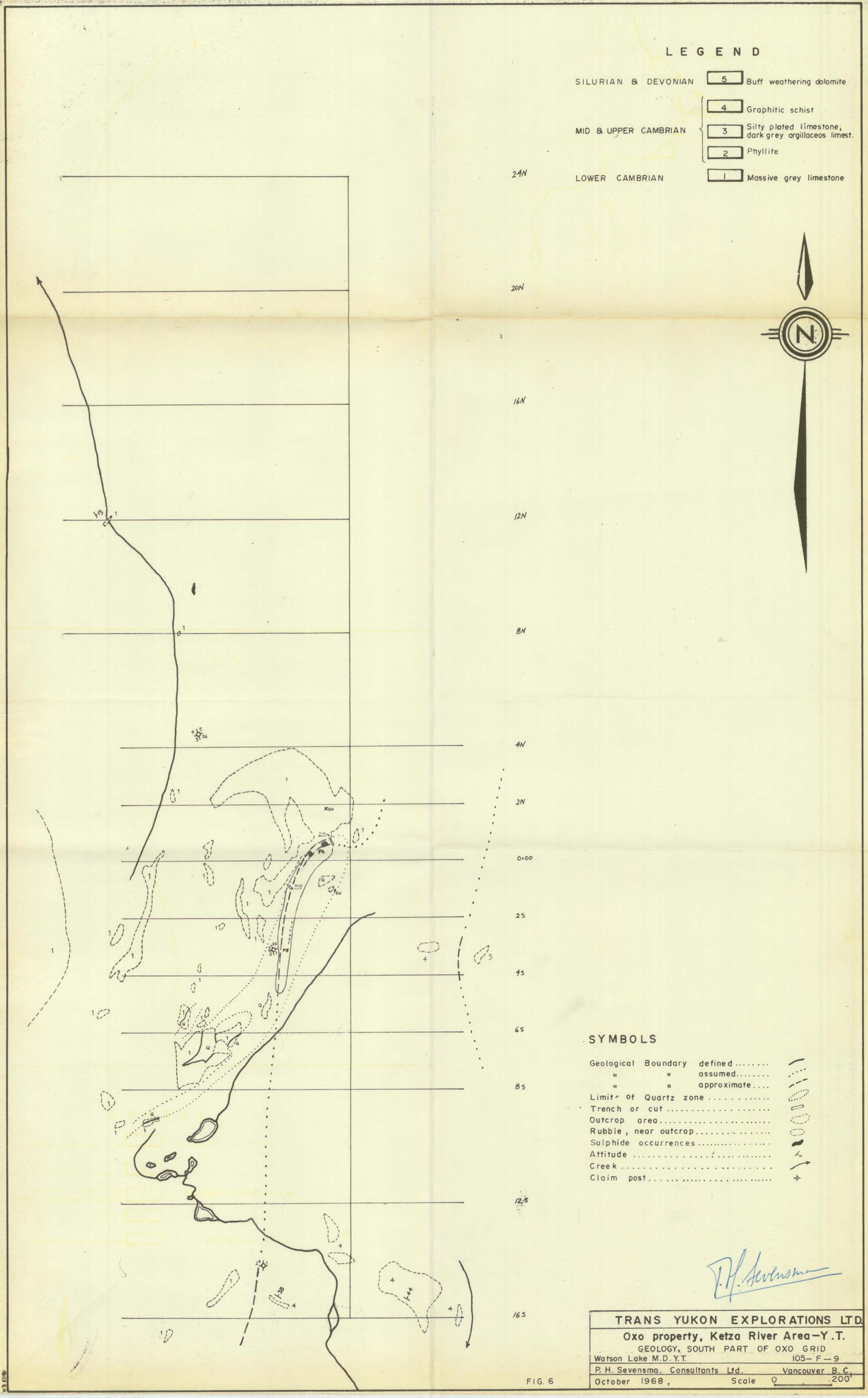
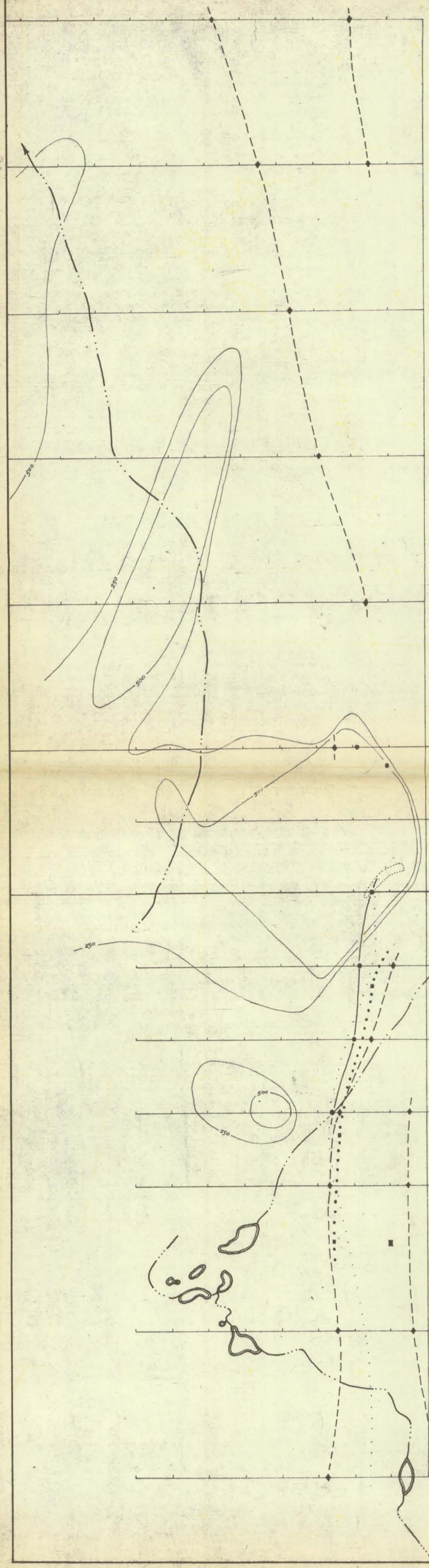

LEGEND
SILURIAN & DEVONIAN
5 Buff weathering dolomite
MID & UPPER CAMBRIAN
4 Graphitic schist
3 Silty plated limestone; dark grey argillaceos limest.
2 Phyllite
LOWER CAMBRIAN
1 Massive grey limestone
N
24N
20N
16N
12N
8N
4N
2N
0+00
2S
4S
6S
8S
12S
16S
OLD CUT
PB
TRENCH
CU
Q
SYMBOLS
Geological Boundary defined........
" " assumed........
" " approximate....
Limits of Quartz zone ....
Trench or cut ....
Outcrop area......................
Rubble, near outcrop...............
Sulphide occurrences ....
Attitude ....
Creek ....
Claim post ....
TRANS YUKON EXPLORATIONS LTD.
Oxo property, Ketza River Area-Y.T.
GEOLOGY, SOUTH PART OF OXO GRID
Watson Lake M.D.Y.T.
105-F-9
P. H. Sevensma Consultants Ltd.
Vancouver B.C.
October 1968,
Scale 0 200'

FIG. 6



24+00 N

20+00 N

16+00 N

12+00 N

8+00 N

4+00 N

2+00 N

0+00

2+00 S

4+00 S

6+00 S

8+00 S

12+00 S

16+00 S

N

SYMBOLS

Conductor and conductive zones:

Crone EM

Ronka EM 16

Ronka horizontal loop

Plot of steepest slope on in Phase, EM 16

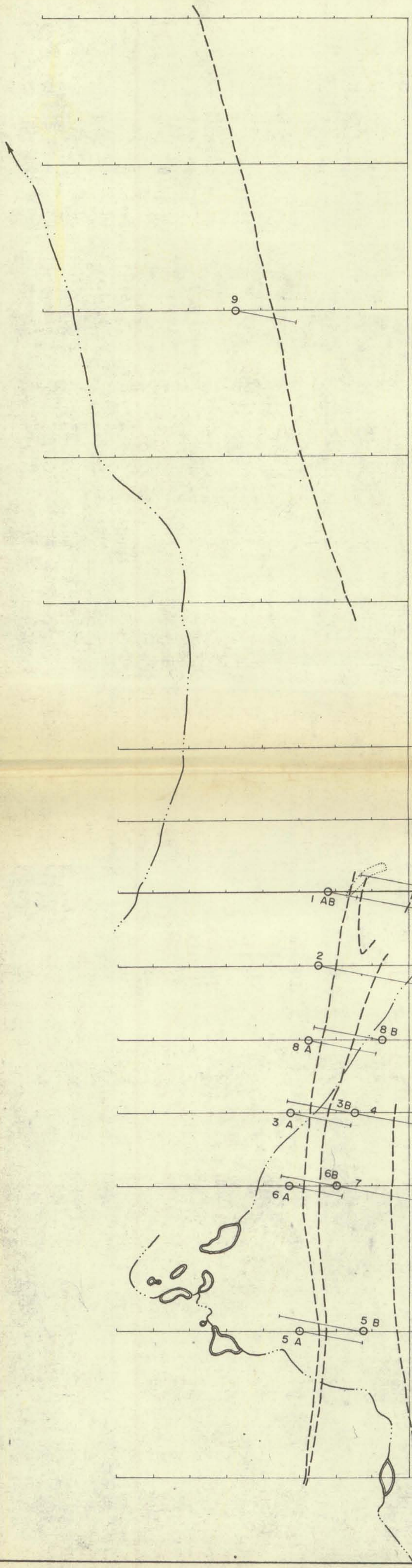
Pb Geochemical anomaly

Sulphide showing

P. H. Sevensma

TRANS-YUKON EXPLORATION LTD.
OXO AREA — GEOCHEMICAL & GEOPH. COMPILATION
Watson Lake M.D.–Y.T. 105 - F - 9
P. H. Sevensma Consultants Ltd.— Vancouver B.C.
October 1968, Scale: 0 200'

FIG. 7



24+00 N

20+00 N

16+00 N

12+00 N

8+00 N

4+00 N

2+00 N

0+00

2+00 S

4+00 S

6+00 S

8+00 S

12+00 S

16+00 S

N

SYMBOLS

Angled drill hole and surface trace

Conductor

Conductive zone

FIG. 8

TRANS-YUKON EXPLORATION LTD.	
OXO SHOWING AREA, PROPOSED DRILL HOLE LOCATIONS	
Watson Lake M.D.–Y.T.	105-F-9
P. H. Sevensma Consultants Ltd.– Vancouver B.C.	
October 1968,	Scale: 0 200'

0+00

2+00 E

4+00 E

6+00 E

8+00 E

10+00 E

12+00 E

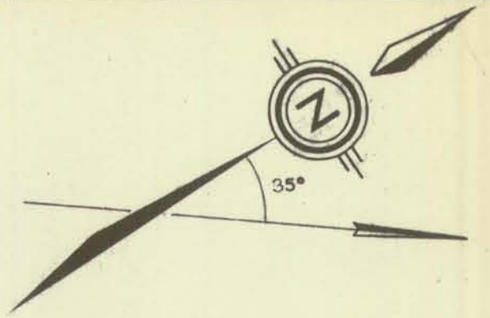
14+00 E

16+00 E

20+00 E

Cat Road

CACHE CREEK GRID



P. H. Sevensma

EM 16 TREND

CRONE EM TREND

MAGNETIC ANOMALY +1600 γ

FIG. 9

TRANS-YUKON EXPLORATION LTD.	
GEOPHYSICAL COMPILATION, CACHE CR. GRID	
Watson Lake M.D-Y.T.	105- F - 9
P. H. Sevensma Consultants Ltd. — Vancouver B.C.	
October 1968,	Scale: 0 200'

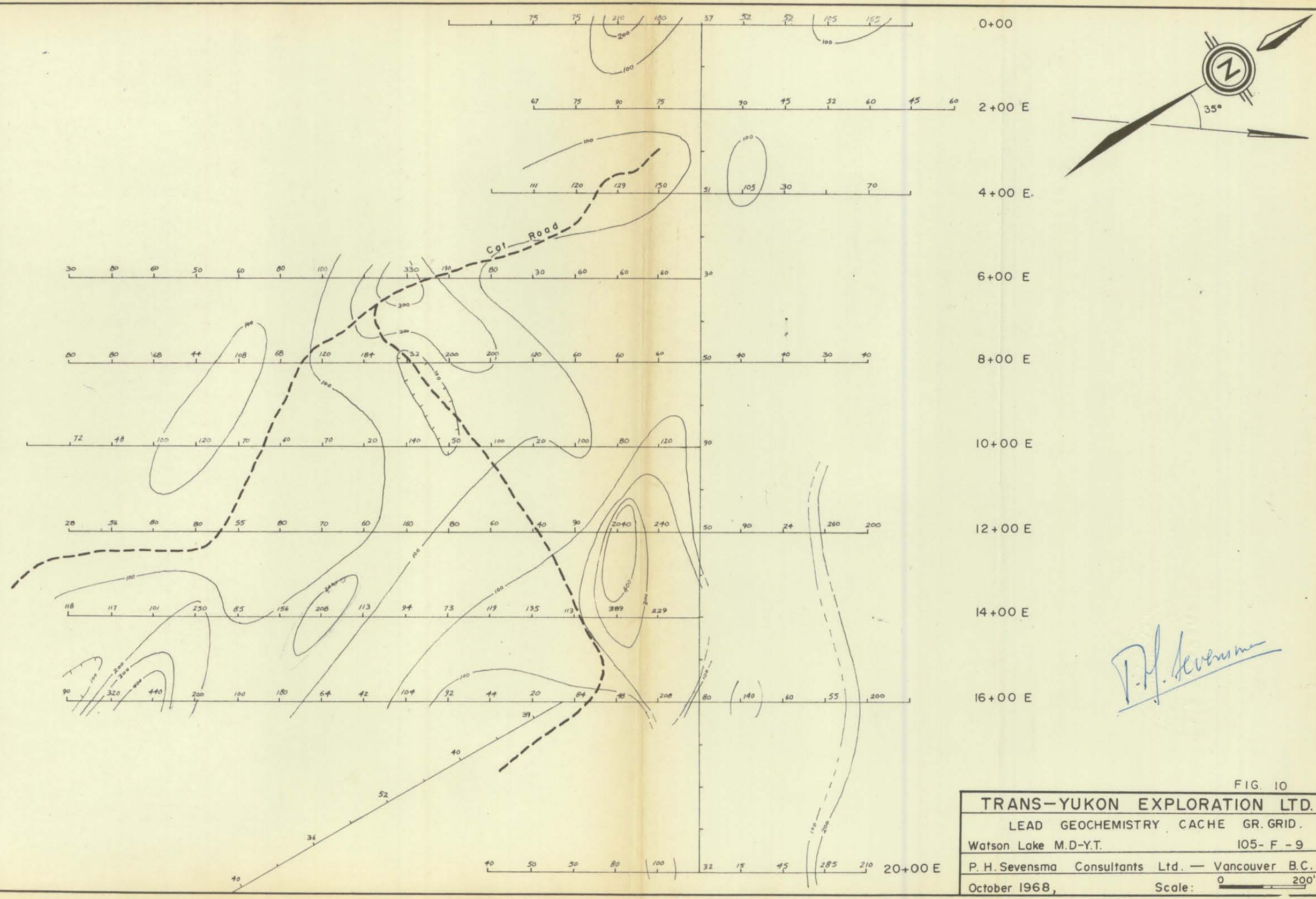


FIG. 10

TRANS-YUKON EXPLORATION LTD.	
LEAD GEOCHEMISTRY CACHE GR. GRID.	
Watson Lake M.D-Y.T.	105- F - 9
P. H. Sevensma Consultants Ltd. — Vancouver B.C.	
October 1968,	Scale: 0 200'

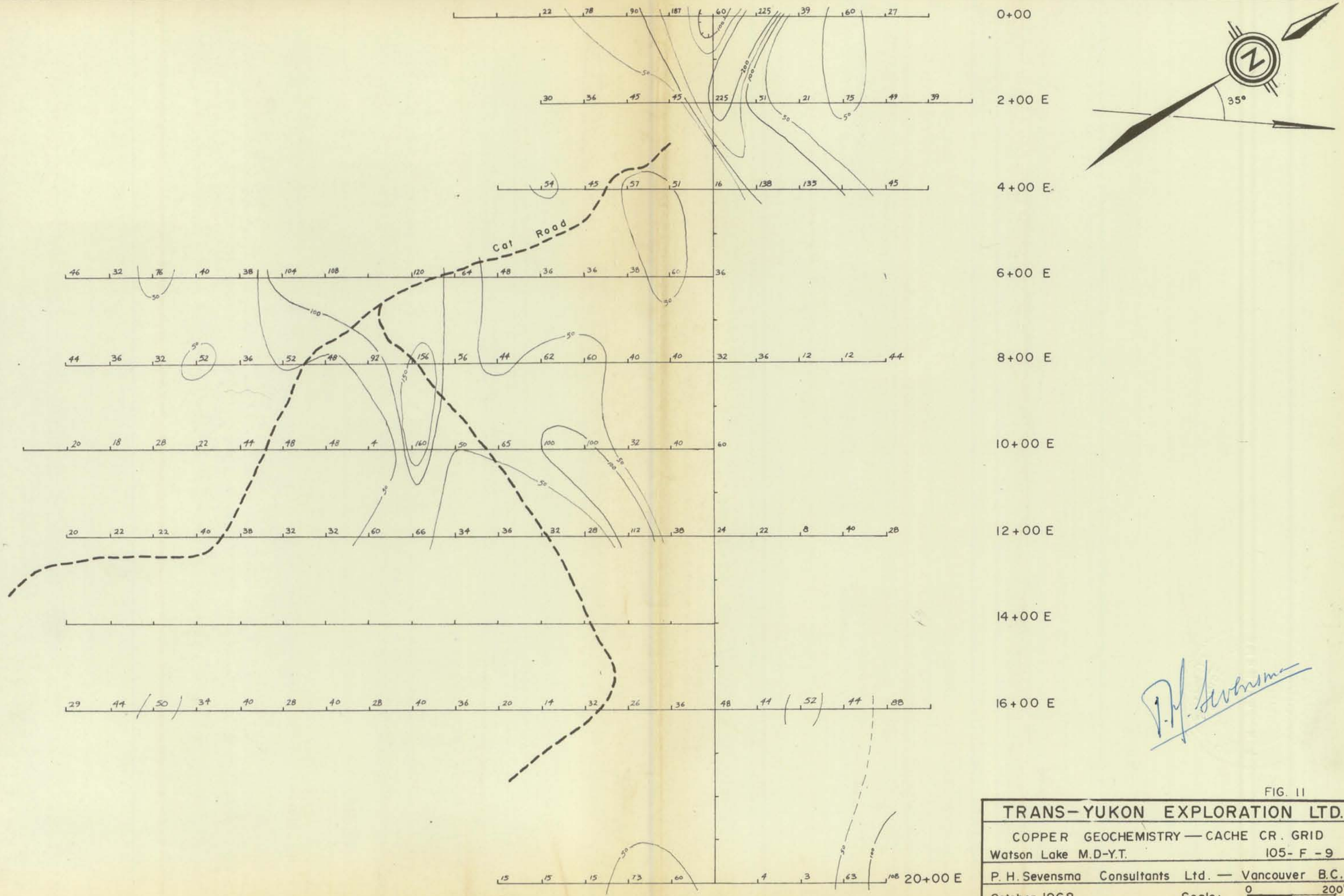


FIG. 11

TRANS-YUKON EXPLORATION LTD.	
COPPER GEOCHEMISTRY — CACHE CR. GRID	
Watson Lake M.D-Y.T.	105- F - 9
P. H. Sevensma Consultants Ltd. — Vancouver B.C.	
October 1968,	Scale: 0 200'